

PATENT COOPERATION TREATY

PCT

From the INTERNATIONAL SEARCHING AUTHORITY

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL SEARCH REPORT AND
THE WRITTEN OPINION OF THE INTERNATIONAL
SEARCHING AUTHORITY, OR THE DECLARATION

To: N.J. AKERS & CO. Attn. Akers, Noel James Grey Friars, Spring Road Harpenden Hertfordshire AL5 3PP UNITED KINGDOM
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(PCT Rule 44.1)

Applicant's or agent's file reference K20122PCT	Date of mailing (day/month/year) 23/06/2005
International application No. PCT/GB2004/004145	International filing date (day/month/year) 28/09/2004
Applicant KCC GROUP LIMITED	

1.	<input checked="" type="checkbox"/>	The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith. Filing of amendments and statement under Article 19: The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46): When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report; however, for more details, see the notes on the accompanying sheet. Where? Directly to the International Bureau of WIPO, 34 chemin des Colombettes 1211 Geneva 20, Switzerland, Facsimile No.: (41-22) 740.14.35 For more detailed instructions, see the notes on the accompanying sheet.
2.	<input type="checkbox"/>	The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.
3.	<input type="checkbox"/>	With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that: <input type="checkbox"/> the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices. <input type="checkbox"/> no decision has been made yet on the protest: the applicant will be notified as soon as a decision is made.
4. Reminders Shortly after the expiration of 18 months from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication. The applicant may submit comments on an informal basis on the written opinion of the International Searching Authority to the International Bureau. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established. These comments would also be made available to the public but not before the expiration of 30 months from the priority date. Within 19 months from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later); otherwise, the applicant must, within 20 months from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices. In respect of other designated Offices, the time limit of 30 months (or later) will apply even if no demand is filed within 19 months. See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the <i>PCT Applicant's Guide</i> , Volume II, National Chapters and the WIPO Internet site.		

Name and mailing address of the International Searching Authority European Patent Office, P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Véronique Baillou
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PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference R20122PCT	FOR FURTHER ACTION <small>see Form PCT/ISA/220 as well as, where applicable, item 5 below.</small>	
International application No. PCT/GB2004/004145	International filing date (day/month/year) 28/09/2004	(Earliest) Priority Date (day/month/year) 29/09/2003
Applicant KCC GROUP LIMITED		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 6 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☐ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. ☐ Certain claims were found unsearchable (See Box II).

3. ☒ Unity of invention is lacking (see Box III).

4. With regard to the title.

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings.

a. the figure of the drawings to be published with the abstract is Figure No. 1

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☐ none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB2004/004145

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-4, 11, 12

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-4,11,12

Apparatus comprising a solvent and/or a solute inlet having a fluidising unit which creates a vortex in the solvent and/or solute, in particular suitable for the leaching of ore.

2. claim: 5

Apparatus comprising a solvent and/or a solute inlet having a fluidising unit which creates a vortex in the solvent and/or solute, in particular suitable for dissolving salt (solute) in water (solvent).

3. claims: 6-8

Apparatus comprising a solvent and/or a solute inlet having a fluidising unit which creates a vortex in the solvent and/or solute, in particular suitable for use with edible or potable solute in the food and drink industries.

4. claims: 9-10

Apparatus comprising a solvent and/or a solute inlet having a fluidising unit which creates a vortex in the solvent and/or solute, in particular suitable for pressurised treatment of seeds prior to sowing.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB2004/004145

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B01F5/00 C22B3/02 B01F3/12

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C22B B01F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-Internal, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 053 142 A (JOHANNES ET AL) 11 October 1977 (1977-10-11) figure 2; abstract	1,2,11, 12
X	EP 0 498 024 A (ERWIN MUELLER GMBH) 12 August 1992 (1992-08-12) figure 1; claim 1	1-3
A	DE 448 148 C (SOCIEDAD MINERA "CUPRUM") 12 March 1928 (1928-03-12) figures; page 1, lines 1-9	1-4,11
A	US 6 368 381 B1 (KING JAMES A ET AL) 9 April 2002 (2002-04-09) figure 3	1-4,11
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" documents published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"A" document member of the same patent family

Date of the actual completion of the international search

22 February 2005

Date of mailing of the international search report

23.05.05

Name and mailing address of the ISA

European Patent Office, P.B. 5018 Patentlaan 2
NL - 2280 LV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 600 ni
Fax: (+31-70) 340-3019

Authorized officer

Bjoerk, P

INTERNATIONAL SEARCH REPORT

International Application No
PCT/GB2004/004145

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT			Relevant to claim No.
Category	Citation of document with indication, where appropriate, of the relevant passages		
A	US 4 298 377 A (SZEKELY ET AL) 3 November 1981 (1981-11-03) claim 1; figures		1-4,11
X,P	WO 03/101868 A (DYNAMIC PROCESSING SOLUTIONS PLC; DELVES, JAMES, EDWARD; YOUNG, NEIL) 11 December 2003 (2003-12-11) figures 1 and 2		1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB2004/004145

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4053142	A	11-10-1977	NONE	
EP 0498024	A	12-08-1992	DE 4103172 A1 AT 149576 T DE 59108582 D1 EP 0498024 A1	06-08-1992 15-03-1997 10-04-1997 12-08-1992
DE 448148	C	12-03-1928	NONE	
US 6368381	B1	09-04-2002	US 6183706 B1 AU 764618 B2 AU 4382700 A AU 738544 B2 AU 1860099 A ZA 9901942 A ZA 200003403 A	06-02-2001 28-08-2003 11-01-2001 20-09-2001 23-09-1999 12-10-2000 02-02-2001
US 4298377	A	03-11-1981	CA 1165128 A1 DE 3071753 D1 EP 0030220 A2 ES 8205572 A1 JP 1312438 C JP 56090938 A JP 60036460 B	10-04-1984 16-10-1986 10-06-1981 01-11-1982 11-04-1986 23-07-1981 20-08-1985
WO 03101868	A	11-12-2003	GB 2389094 A AU 2003242837 A1 BR 0311521 A CA 2487698 A1 EP 1532064 A1 WO 03101868 A1	03-12-2003 19-12-2003 22-02-2005 11-12-2003 25-05-2005 11-12-2003

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